



Edition: 1st Edition 2024  
 pages: 384  
 Images: 1800  
 Cover: Hardcover; 21.6 x 27.9 cm  
 ISBN: 978-1-64724-125-4  
 Stock No.: 19471  
 Published: January 2024

258,00 €

Price  
 Subject to changes!

#### Quintessenz Verlags-GmbH

📍 Ifenpfad 2-4  
 12107 Berlin  
 Germany

☎ +49 (0) 30 / 76180-5

📠 +49 (0) 30 / 76180-680

✉ info@quintessenz.de

🌐 <https://www.quintessence-publishing.com/deu/de>

## Book information

**Editor:** Misch, Craig M.  
**Title:** Horizontal and Vertical Bone Augmentation for Dental Implant Therapy

#### Short text:

While the landscape of implant dentistry is always evolving, one constant is the need for sufficient bone volume at the site of implant placement. The management of bone deficiencies is a clinical challenge with an array of possible solutions, and bone augmentation is not one size fits all. This book simplifies things by presenting the assessment criteria and biologic principles required to make clinical decisions as well as the techniques and materials needed to successfully perform horizontal and vertical bone augmentation. The first several chapters provide the reader with fundamental knowledge of the science of bone augmentation and details the diagnosis and planning phases for bone augmentation surgery. The centerpiece of the text is the Michigan Classification for horizontal and vertical bone augmentation, developed by Drs Hom-Lay Wang and Craig Misch, which offers clinicians an evidence-based decision tree for managing different clinical situations based on the type of defect. Finally, the remaining chapters describe the various techniques for horizontal and vertical bone augmentation, including novel technologies like virtual patient planning for prosthetic guided bone augmentation, customized scaffolds for bone regeneration, and recombinant growth factors to improve regenerative capacity. Written by the most knowledgeable clinicians and researchers in their fields, this book prepares the reader to achieve predictability and success in implant dentistry, no matter the presenting situation.

#### Contents

Chapter 01. Bone Volume for Dental Implant Placement  
 Chapter 02. The Science of Bone: Form and Function  
 Chapter 03. Biologic Principles of Bone Augmentation  
 Chapter 04. The Biology of Bone Grafting Materials  
 Chapter 05. Use of Platelet-Rich Fibrin for Bone Augmentation  
 Chapter 06. Recombinant Growth Factors and Novel Graft Constructs for Oral Bone Tissue Engineering  
 Chapter 07. The Michigan Classification and Decision Trees for Horizontal and Vertical Bone Augmentation  
 Chapter 08. Clinical Evaluation for Bone Augmentation  
 Chapter 09. Systemic and Local Considerations for Bone Augmentation  
 Chapter 10. Patient Preparation for Bone Augmentation  
 Chapter 11. Guided Bone Regeneration for Horizontal and Vertical Bone Augmentation  
 Chapter 12. Mesh Grafting  
 Chapter 13. Block Bone Grafting  
 Chapter 14. Ridge Expansion  
 Chapter 15. Interpositional Bone Grafting  
 Chapter 16. Distraction Osteogenesis  
 Chapter 17. Preparation of the Recipient Site for Bone Augmentation  
 Chapter 18. Soft Tissue Reconstruction for Bone Augmentation

#### Contributors

Tara Aghaloo • Carlo Barausse • Chia-Yu Chen • Matteo Chiapasco • Benjamin R. Coyac • Alessandro Cucchi • Dan Cullum • Pietro Felice • Matthew Fien • William V. Giannobile • Howard Gluckman • Jill A. Helms • Ole Jensen • David Kim • Jessica Latimer • Bach Le • Mark Ludlow • Shogo Maekawa • Richard J. Miron • Maggie Misch-Haring • Alberto Monje • Rodrigo Neiva • Lorenzo Tavelli • Istvan A. Urban • Hom-Lay Wang

**Categories:** Implantology